

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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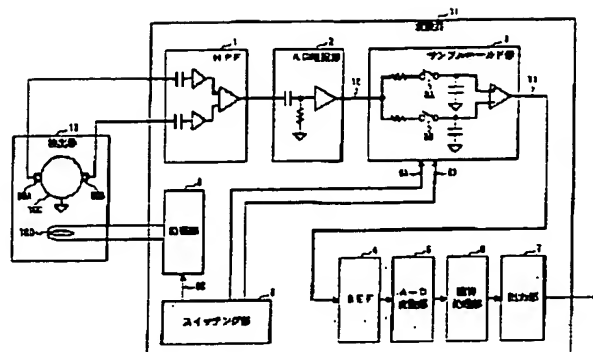
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TITLE : ELECTROMAGNETIC FLOWMETER



**ABSTRACT :** PROBLEM TO BE SOLVED: To attenuate the fluctuation of measurement output attributable to a commercial power supply frequency noise by attenuating the differential frequency between an excitation frequency and a commercial power supply frequency by providing a band attenuation filtering means.

**SOLUTION:** The fluctuation of a DC flow signal 13 is generated in the differential frequencies between an excitation frequency  $f_{ex}$  and a commercial power supply frequency  $f_n$ , namely  $f_{ex}-f_n$  (23) and  $f_{ex}+f_n$  (24). Therefore, by providing a band attenuation filter BEF4 with a specific frequency characteristic at the later stage of a sample hold part 3 and attenuating differential frequency components 23 and 24 being included in the DC flow signal 13, fluctuation being generated due to the commercial power supply frequency noise can be attenuated. A DC flow signal 13 from the sample hold part 3 can be read as digital information via an A/D conversion part 5 in an operation-processing part 6, and a desired measurement flow value is calculated from a fluid flow rate by executing a specific operation processing before being converted to a specific signal by an output part 7.

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